



Figure S1. Comparison DLS study of the stability of Au-Cit and Au-PEG-COOH in (A) PBS 1x pH 7.4, (B) NaHCO₃ pH 7.2, and (C) DMSO. In A, it is evident that the PEGylated gold nanoparticles can be stable in PBS at pH 7.4 as an isotonic solution that is used in biological research whereas Au-Cit shows significant aggregation. In B, both Au-Cit and Au-PEG-COOH are unaffected by NaHCO₃ at pH 7.2. On the other hand, in C, both Au-Cit and Au-PEG-COOH indicate some aggregation to particles with four times or two times the average diameter in the aqueous solution (Figure 1 in the main text). This indicates some higher stability of the PEGylated gold nanoparticles compared to Au-Cit in DMSO solution.